

Work Order ID 104616

104616

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July-12-13 10:30:47 AM

Item ID: D2521 Accept *N900040100* Setup Start *NS1*
 Revision ID: Stop *NS2*
 Item Name: Individual Bearpaw
 Start Date: 7/12/13 Start Qty: 6.00 *6* Cust Item ID:
 Required Date: 7/12/13 Req'd Qty: 6.00 *6* Customer:
 Reference:

Approvals: Process Plan: MLS Date: 1307-15 Tooling: _____ Date: _____ Run Start *NR1*
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D2521	Rev J								

120 0.00
 120 FLOW WATER JET
 Waterjet Memo 0.00
 FLOW CNC Waterjet Cut Blank as per D2521 blank file
 04mm i" 6 0 Jm B-08-19

130 0.00
 130 HAAS CNC VERTICAL MACHINING #1
 HAAS 1 Memo 0.00
 HAAS CNC vertical machine #1 1-Inspect material for defects or damage prior to machining
 2-Machine as per Folio and Dwg D2521 Identify as D2521
 3-Deburr 13/09/05

140 0.00
 140 QC2- Inspect parts off machine FAI/FAIB
 QC Memo 0.00
 Quality Control 13/09/05

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

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Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Suspected Unapproved <input type="checkbox"/>	AGAINST DEPARTMENT/PROCESS <table style="width: 100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>	
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Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric <input type="checkbox"/> Cracks <input type="checkbox"/> Crimp/Kink/Ripple/Wave <input type="checkbox"/> Cuffs <input type="checkbox"/> Crushing <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Marks/Chatter <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damage/Defect <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drawing <input type="checkbox"/> Drill Holes <input type="checkbox"/> Finish <input type="checkbox"/> Fit/Function	<input type="checkbox"/> Folio/Program <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete/Unqualified <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Misaligned/off center <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Off-set <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence	<input type="checkbox"/> Outside Dimensions <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge <input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Set-up <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other
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10/3-0923

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Picklist Print

July-12-13 10:30:47 AM

Page 1/1

Work Order ID: 104616
Parent Item: D2521
Parent Item Name: Individual Bearpaw

Start Date: 7/12/13
Start Qty: 6.00
Required Date: 7/12/13
Required Qty: 6.00

Comments: IPP Rev:A 08-10-01 New Manufacturing Method JLM Verified By:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
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MUHMWB10		Purchased	No				sf	780.0003		44.210527			
UHMW 1" Black										45			

Jm1308-19

Location	Loc Qty	Loc Code
MAT019	780.0002895	
121278	11.0002895	
122575	47.6	
123229	53	
123704	63.8	
123949	6.96	
124382	197.12	
124758	17.52	
125137	383	

125137

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DART AEROSPACE LTD		Work Order:	104616
Description: Bearpaw		Part Number:	D2521
Inspection Dwg: D2521		Rev: J	Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☐ Prototype

Inspection Sheet Drawing Dimension			Actual Dimension	Accept	Reject	Method of Inspection	Comments
Dim	Min	Max					
A	0.260	0.266	.261	✓		MH-04	Caliper
B	0.90	0.96	.925	✓		1	1
C	0.27	0.330	.303	✓		MH-04	Caliper
D	0.470	0.530	.530	✓		MH-04	Caliper
E	21.740	21.760	21.75	✓		MH-07	Tape
F	0.72	0.780	.747	✓		MH-04	Caliper
G	0.35	0.410	.379	✓		MH-04	Caliper
H	11.490	11.570	11.500	✓		MH-07	Tape
I	3.41	3.47	3.418	✓		MH-04	Caliper
J	11.790	11.810	11.805	✓		MH-04	Caliper
K	9.47	9.53	9.50	✓		MH-04	Caliper
L	7.190	7.210	7.195	✓		MH-04	Caliper
M	6.910	6.970	6.94	✓		MH-07	Tape
N	44.47	44.530	44.50	✓		MH-07	Tape
O	6.590	6.650	6.625	✓		enc-02	Caliper
P	0.940	0.980	.960	✓		MH-04	Caliper
Q	18.97	19.03	19.00	✓		MH-07	Tape
R	0.350	0.410	.380	✓		MH-04	Caliper
S	0.740	0.780	.764	✓		MH-04	Caliper
T	0.240	0.280	.260	✓		MH-04	Caliper
U	0.370	0.410	.385	✓		118-120	Micro deep
V	0.740	0.780	.760	✓		118-120	Micro deep
W	0.740	0.780	.764	✓		MH-04	Caliper

Measured by: MH <i>[Signature]</i>	Audited by: J.A. DAS <i>[Signature]</i>	Prototype Approval:	N/A
Date: 03/09/05	Date: 13/09/07	Date:	N/A

Rev	Date	Change	Revised by	Approved
A	03.09.22	New Issue P/O D205-564-011 & D430-688-011	KJ/RF	
B	05.06.15	Dimensions and tolerances changed	KJ/RF	
C	06.08.31	Dimensions updated per D2521 Rev. J	KJ/JLM <i>[Signature]</i>	<i>[Signature]</i>



DESIGN	DRAWN BY	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED	APPROVED	DRAWING NO.	REV. J
		D2521	SHEET 1 OF 3
DATE	TITLE		SCALE
06.07.28	205 BEARPAW		NTS
A	95.11.28	NEW ISSUE	
B	96.01.11	SHOW BENDING MOVE HOLES	
C	96.01.29	ADJUST HOLE LOCATION FOR TOOLING	
D	96.05.14	ADJUSTED BEAR PAW THICKNESS	
E	96.12.18	43.500 WAS 46.750	
F	97.05.07	ADDED REAR POCKET, MOVED HOLES	
G	98.08.06	ADD C'BORE AND CHAMFER EDGES	
H	03.01.30	CHANGE GEOMETRY FOR RUN-ON LDG.	
I	05.05.20	REMOVE BEND, CHANGE TOLERANCES	
J	06.07.28	CHANGE FOR FLOAT SKIDTUBE	

104616 ML5
13-07-15
UNCLASSIFIED
DATE 06-08-23 BY 104616 ML5

RELEASED

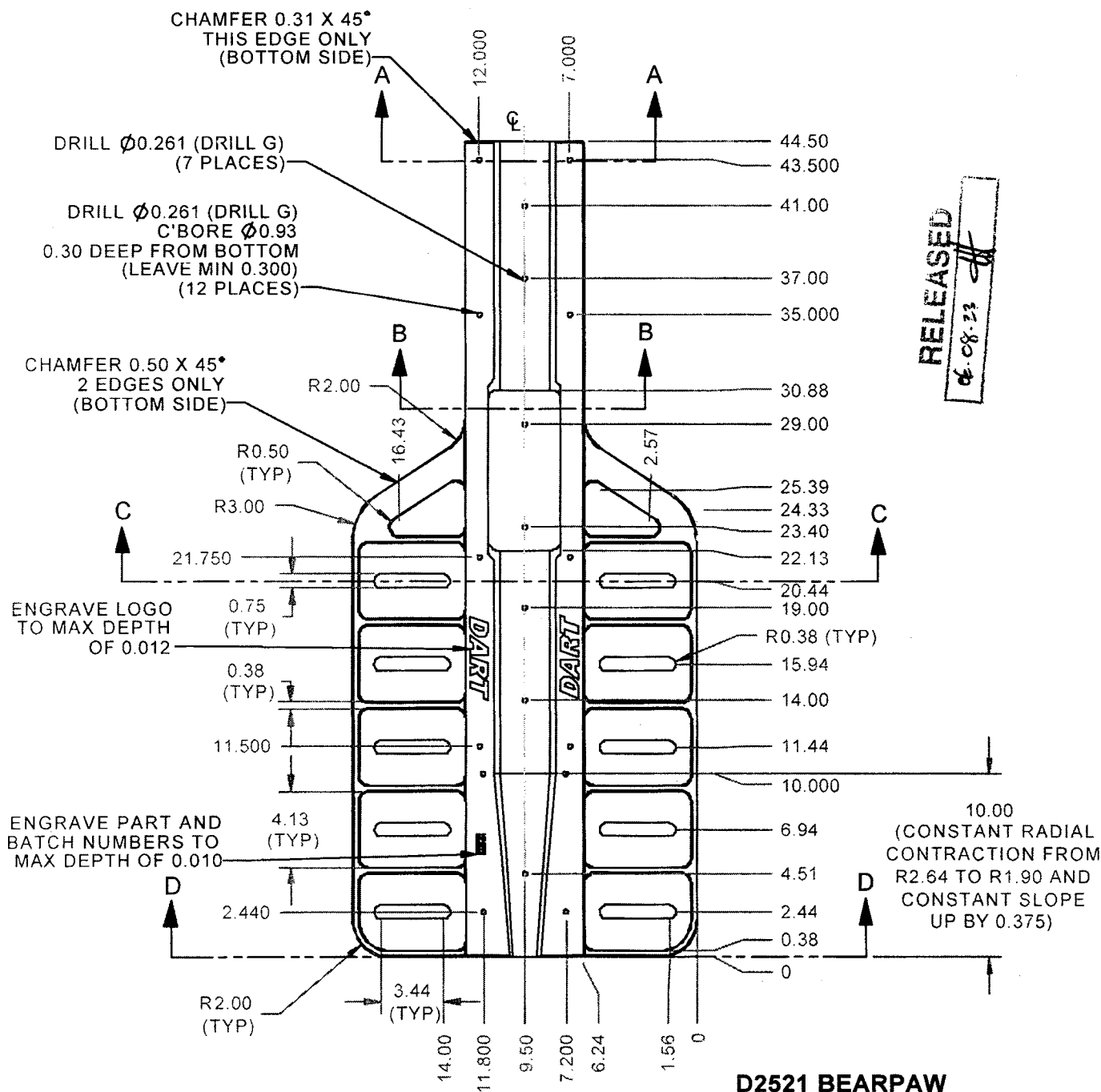
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DESIGN	DRAWN BY	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED	APPROVED	DRAWING NO.	REV. J
		D2521	SHEET 2 OF 3
DATE		TITLE	SCALE
06.07.28		205 BEARPAW	1:8



NOTES:

- 1) MATERIAL: UHMW BLACK PER SPEC CONTROL DRAWING D2689, 1.000 THICK (MACHINE TO 0.950)
- 2) FINISH: NONE
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL UNMARKED SHARP EDGES 0.005 TO 0.030
- 6) PART IS SYMMETRIC ABOUT ϕ

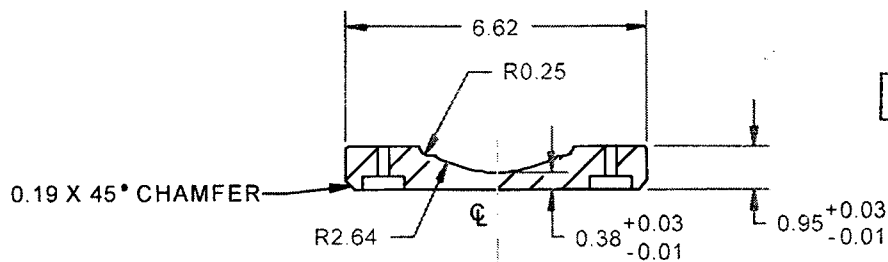
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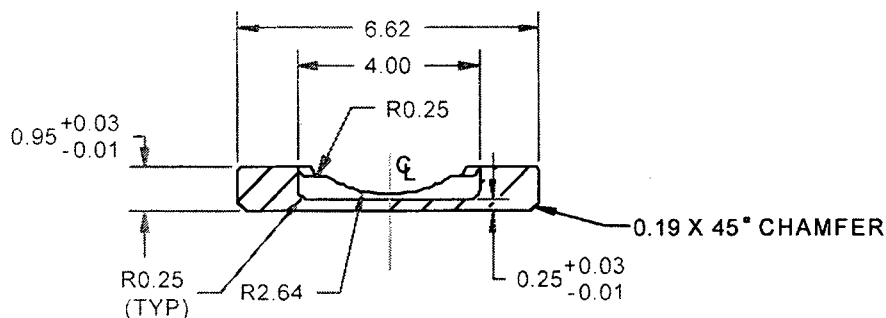
104616



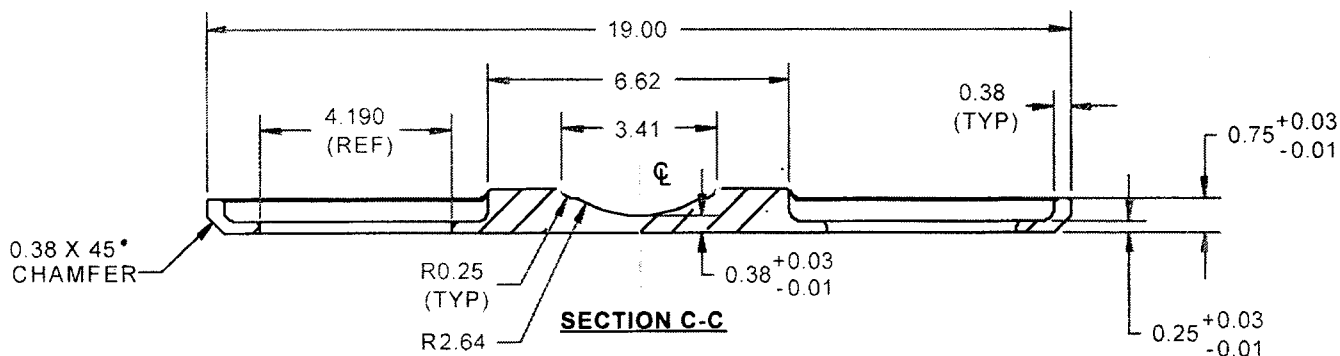
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DATE		TITLE	SCALE
06.07.28		205 BEARPAW	1:4



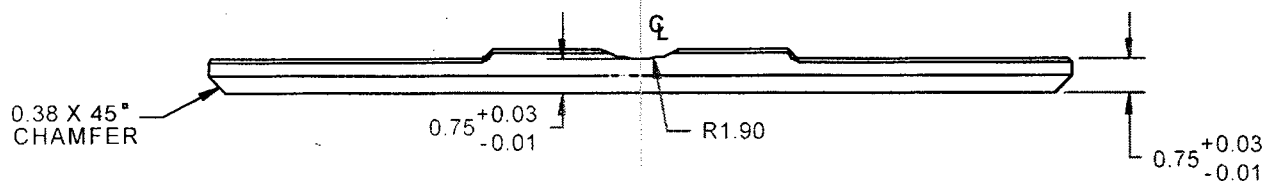
SECTION A-A



SECTION B-B



SECTION C-C



SECTION D-D

RELEASED

06-08-23

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